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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,741	12/12/2001	Porunellor A. Mathew	UNT-0004 (120746.00004)	1107

7590 12/02/2004

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EXAMINER

CANELLA, KAREN A

ART UNIT	PAPER NUMBER
1642	

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/021,741

Applicant(s)

MATHEW ET AL.

Examiner

Karen A Canella

Art Unit

1642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16, 20-22, 25-27, 31-33 and 36-39 is/are pending in the application.
- 4a) Of the above claim(s) 1-13, 36 and 37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-16, 20-22, 25-27 and 31-33 is/are rejected.
- 7) ☒ Claim(s) 38 and 39 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

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### **DETAILED ACTION**

1. Claims 14, 20-22, 25-27 and 31-33 have been amended. Claims 17-19, 23, 24, 28-30, 34, 35 have been canceled. Claims 38 and 39 have been added. Claims 1-16, 20-22, 25-27, 31-33, 36-39 are pending. Claims 1-13, 36 and 37, drawn to non-elected inventions, remain withdrawn from consideration. Claims 14-16, 20-22, 25-27, 31-33, 38 and 39 are under consideration.
2. Sections of Title 35, U.S. Code not found in this action can be found in a previous action.
3. Claim 14 and 25 are objected to for lacking a preposition in the phrase “to the specific portion the natural killer cell surface receptor”.
4. Claims 14, 25 and 38 and 39 are objected to for failing to comply with the Sequence Rules and Regulations. Applicant has amended the specification to recite the proper SEQ ID NO and provided a new Sequence Listing incorporating SEQ ID NO:3-5. However, the CRF has not been updated to reflect the new sequences. Applicant is required to submit a new CRF and a new Statement averring that the information in the Sequence Listing and in the CRF is identical.
5. Claims 14-16, 20-22, 25-27, 31-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 14 and 35 recite “proteinaceous molecule having sequence homology to the specific portion [of] the natural killer cell surface receptor”. It is unclear what “the specific portion” is.
6. The rejection of claims 14, 20, 21, 25-27 under 35 U.S.C. 102(b) as being anticipated by Baker et al (WO 99/63088) is maintained for reasons of record.
7. The rejection of claims 14-16, 20-22, 25-27, 31-33 under 35 U.S.C. 102(e) and 35 U.S.C. 102(a) as being anticipated by Starling is maintained for reasons of record.

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8. Applicant argues that the amended claims now require the presence of SEQ ID NO:3, 4, 5 or combinations thereof and therefore this disqualifies Baker et al or Starling et al as a reference. This has been considered but not found persuasive. The specific limitation of the proteinaceous molecule as a recombinant or synthetic proteinaceous molecule “having” the specific amino acid sequence of SEQ ID NO:3, 4 or 5 does not limit the claim to a proteinaceous molecule consisting of SEQ ID NO:3, 4 or 5 because the term “having” is considered the same as “comprising”. The PRO polypeptide of Baker or the APEX-1 protein of Starling et al would inherently “have” the claimed amino acid sequences.

It is noted that applicant argues on the top of page that claims 14-16 are drawn to antibodies which bind to SEQ ID NO:3, 4 and 5; however that is not the case. Claim 14 is drawn to a monoclonal antibody produced by immunizing an animal with a proteinaceous molecule and screening the resulting fusion cell lines to identify antibodies having affinity toward the proteinaceous molecule having sequence homology to a specific portion of a natural killer cell surface receptor, wherein the proteinaceous molecule further comprises...a peptide sequence of SEQ ID NO:3, 4, 5 or a combination thereof. Thus, the antibody is screened for binding ability to a natural killer cell surface receptor. It is not required that the antibody bind to the epitopes of SEQ ID NO:3, 4, or 5, although it is required that the proteinaceous molecule further comprise these amino acid sequences. In contrast, claims 38 and 39 require that the monoclonal antibody binds to SEQ ID NO:3, 4 or 5.

9. The rejection of claims 14-16 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 17 and 18 or co-pending application 09/475,365 is withdrawn as the amended claims require the proteinaceous molecule comprise SEQ ID NO:3, 4 or 5.

10. All other rejections and objections as set forth or maintained in the previous Office action are withdrawn.

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11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

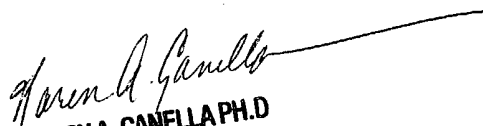
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen A Canella whose telephone number is (571)272-0828. The examiner can normally be reached on 10 a.m. to 9 p.m. M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Siew can be reached on (571)272-0787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Karen A. Canella, Ph.D.

11/29/2004

  
**KARENA CANELLA PH.D**  
**PRIMARY EXAMINER**